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10/527,050

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Masaharu Tamatsu

050-401

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11/30/2009

APEX JURIS, PLLC

12733 LAKE CITY WAY NORTHEAST

SEATTLE, WA 98125

EXAMINER

AL HASHEMI, SANA A

ART UNIT

PAPER NUMBER

2156

MAIL DATE

DELIVERY MODE

11/30/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

| | | | |
|------------------------------|--------------------------------------|---|--|
| Office Action Summary | Application No. 10/527,050 | Applicant(s) TAMATSU, MASA HARU | |
| | Examiner Sana Al-Hashemi | Art Unit 2156 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 16-19 and 21-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 16-19, 21-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

This Office action is issued in response to applicant amendment filed 8/12/09, 2005 claiming the priority of PCT JP03/11592 filed Sep. 10, 2003.

Claims 16-19, 21-26, were amended. Claim 1-15, 20, and 27-30 were canceled. No Claims were added.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 16-19, 21-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Murray et al (Murray hereinafter) US Patent Application Publication No. 2006/0106835 Claim priority of 06/129119 filed April 13, 1999.

Regarding Claims 16, and 29, Murray discloses a database reorganization system, comprising:

data records for holding data entries, each data record contain a primary key (Paragraph 38, lines 1-4, Murray);

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primary blocks for storing data records in the order of the primary keys thereof
(Paragraph 38, lines 5-8, Murray);

overflow blocks linked to the primary blocks (Paragraph 39, lines 1-5, Murray);

a current location table and a new location table for containing in contiguous regions
entries describing the addresses of the primary blocks (Paragraph 12, lines 1-7, Murray);

a current location table reorganization pointer that indicates through which entry in the
current location tables reorganization has completed (Paragraphs 12, lines 7-15, Murray);

a new location table reorganization pointer that indicates through which entry in the new
location table reorganization has completed (Paragraphs 14, lines 1-7, Murray); and

a current location table final pointer that indicates the final position used by that location
table (Paragraph 15, lines 1-6, Murray).

Regarding Claim 17, Murray discloses a database reorganization system wherein the
database recognition system is configured to sequentially write entries in the current location
table to the new location table (Paragraph 17, lines 1-7, Murray) and, where any overflow block
is present, to delink said overflow blocks, creating new entries corresponding to the primary
blocks and adding the new entries to the new location table (Paragraph 17, wherein the update
correspond to adding the new entries, and Paragraph 18, wherein the unavailable corresponds to
delink, Murray).

Regarding Claim 18, Murray discloses a database reorganization system further
comprising:

a first means for, upon receipt of a database reorganization command, creating a new
location table in addition to the current location table (Paragraph 19, lines 1-7, Murray); and

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a second means for sequentially writing entries in the current location table to the new location table and, when an overflow blocks linked to a primary block is detected, delinking that overflow blocks, adding new entries to the new location table, and rendering the overflow blocks as new primary blocks (Paragraph 20, Murray).

Regarding Claim 19, Murray discloses a database reorganization system further comprising:

shifting before and after records in primary blocks and eliminating fragmentation when a storage rate in primary blocks falls outside a range of predetermined values (Paragraph 23, lines 1-7, Murray); and

sequentially writing entries in the current location table to the new location table (Paragraph 23, lines 8-16, Murray).

Regarding Claim 21, Murray discloses a database reorganization system further comprising:

when retrieving a record with the primary key during reorganization, evaluating whether the target primary key with the value is greater or less than the primary key of the record contained in the primary block and the overflow blocks that the reorganization pointers is pointing to (Paragraph 44, Murray); and

when the target key is evaluated to be greater than or equal to the primary key of the record stored in the block that the reorganization pointer is pointing to, using the current location table to retrieve the target record (Paragraphs 44, Murray); and

when the target primary key is evaluated to be less than that primary key, using the new location table to retrieve the target record (Paragraph 44, Murray).

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Regarding claim 22, Murray discloses a database reorganization system, comprising:
data records for holding data containing primary keys and alternate keys (Paragraph 48, lines 1-6, Murray);

alternate-key entries that hold data entries, each alternate-key entry comprises an alternate key and a primary key (Paragraph 48, lines 6-11, Murray);

alternate-key blocks for containing the alternate-key entries (Paragraph 50, lines 1-6, Murray);

alternate-key overflow blocks linked to the alternate-key blocks (Paragraph 50, lines 6-11, Murray);

a current alternate-key location table and new alternate-key location tables for containing alternate-key location table entries in contiguous regions (Paragraph 54, lines 1-9, Murray);

a current alternative key location table reorganization pointer for current alternate-key location table which indicates a progress of recognition of the alternate-key location table and alternate-key blocks for the current alternate-key location tables (Paragraphs 55, lines 1-7, Murray);

an alternative key final pointer that is provided to the current alternative key location table to indicate the final position used by the alternative key location table (Paragraph 56, Murray); and

Regarding Claim 23, Murray discloses a database reorganization system comprising the steps of:

sequentially writing entries in current alternate-key location tables to a new alternate-key location table and, where an alternate-key overflow blocks exists, delinking the alternate-key

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overflow blocks, creating new alternate-key location table entries corresponding to the alternate-key blocks and adding new alternate-key location table entries to a new alternate-key location table (Paragraph 59, Murray).

Regarding Claim 24, Murray discloses a database reorganization system further comprising:

upon receipt of a database reorganization command, creating a new alternate-key location table in addition to the current alternate-key location table (Paragraph 12, Murray); and

sequentially writing entries in the current alternate-key location table to the new alternate-key location table and, when alternate-key overflow block linked to alternate-key block is detected, delinking that alternate-key overflow block, adding new alternate-key location table entries to new alternate-key location table and rendering these as new alternate-key blocks (Paragraph 59, Murray).

Regarding Claim 25, Murray discloses a database reorganization system further comprising the steps of:

shifting before and after records in the alternate-key blocks and eliminating fragmentation when the storage rate in the alternate-key blocks falls outside a range of the specified values (Paragraph 23, lines 1-7, Murray); and

sequentially writing entries in the current alternate-key location table to new alternate-key location table (Paragraph 23, lines 8-16, Murray).

Regarding Claim 26, Murray discloses a database reorganization systems further comprising the steps of:

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when retrieving a record with the alternate key during reorganization, evaluating whether the target alternate key value is greater or less than the alternate key of the entry contained in the alternate-key block that indicated by at least one of said reorganization pointer is pointing (Paragraph 44, Murray); and

using the current alternate-key location table to retrieve the target entry when the target alternate key is evaluated by the comparative means to be greater than or equal to the alternate key of the entry stored in the alternate-key blocks of that the reorganization pointer is pointing, using the new alternate-key location table to retrieve the target entry when the target alternative key is evaluated to be less than the value of that alternate key (Paragraph 59, Murray).

Response to Arguments

Applicant's arguments filed 8/12/09 have been fully considered but they are not persuasive.

It is a well settled rule that a reference must be considered not only for what it expressly teaches but also for what it fairly suggests. See *In re Burckel*, 592 F.2d 1175, 201 USPQ 67 (CCPA 1979) and *In re Lamberti*, 545 F.2d 747, 192 USPQ 278 (CCPA 1976) as well as *In re Bode*, 550 F.2d 656, 193 USPQ 12 (CCPA 1977) which indicates such fair suggestions to unpreferred embodiments must be considered even if they were not illustrated. Additionally, it is an equally well settled rule that what a reference can be said to fairly suggest relates to the concepts fairly contained therein, and is not limited by the specific structure chosen to illustrate such concepts. See *In re Bascom*, 230 F.2d 612, 109 USPQ 98 (CCPA 1956).

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Applicant argues the applied art discloses hierarchical database which is different than the claimed invention in reorganizing the database.

Examiner disagrees. Nothing in the claims states no hierarchical database is used the only thing the claims call for organizing databases and the applied art disclose the use of hierarchical database among other method of organizing databases. Therefore the applied art discloses the claimed invention.

Applicant argues the applied art fail to disclose "a current location table and a new location table for containing in contiguous regions entries describing the address".

Examiner disagrees. The applied art at Fig. 3, and Paragraph 39, disclose the claimed limitation.

Applicant argues the applied art fails to disclose the new location which means a new address.

Examiner disagrees. First the new location as broadly interpreted means an new space to place the data and second as disclosed in page 4, first paragraph of the applied art the blocks are moved into a data space having a large addressing range, to save the new address. Thus the argued limitation has been met by the applied art.

Applicant argues the applied art fail to disclose "a current location table final pointer that indicates the final position used by that at location table".

Examiner disagrees. The applied art at Paragraph 46, discloses the final pointer indicates the final position used by that location.

Applicant argues the applied art fail to disclose "adding the new entries to the new location table".

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Examiner disagrees. Paragraph 47, of the applied art discloses the teaching of adding new entries to the new location table.

Applicant argues the applied art can not be found for shifting before and after records in primary block and eliminating fragmentations when a storage rate found.

Examiner disagrees. Paragraph 54, of the applied art discloses the argued limitation.

Applicant argues the applied art does not suggest retrieving a record with the primary key during reorganization, and no target key evaluated to be greater or equal to the primary key of the record.

Examiner disagrees. As stated in paragraphs 44 and 48 among other paragraph the applied art teaches the retrieving of the primary key during reorganization, and no target key evaluated to be greater or equal to the primary key of the record.

Applicant argues the applied art does not discuss the alternate key blocks for containing the alternate key entries location table.

Examiner disagrees. Paragraphs 54, 55, and 59 are some of the paragraphs that disclose the alternate key blocks for containing the alternate key entries location table.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after

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the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Point of Contact

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sana Al-Hashemi whose telephone number is 571-272-4013. The examiner can normally be reached on 8Am-4:30Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Pierre Vital can be reached on 571-272-4215. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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/Sana Al-Hashemi/

Primary Examiner, Art Unit 2156

November 23, 2009